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CHICAGO RIDGE / STONY CREEK GOLF  
GENERAL



**Professional Service Industries, Inc.**  
PTL/A & H Flood Division

US EPA RECORDS CENTER REGION 5



485653

November 6, 1990

BY FACSIMILE TRANSMISSION

Illinois Environmental Protection Agency  
Division of Land Pollution Control  
State Site Management Unit  
Post Office Box 19276  
Springfield, Illinois 62794

Attention: Mr. Robert A. Carson, P.E.

Re: Supplementary Sampling Plan  
Proposed Stony Creek Golf Course  
Oak Lawn, Illinois  
PSI File Number: 041-04039-1

Dear Sir:

As requested, attached for IEPA review is a copy of a proposed Supplementary Sampling Plan and a PSI Site Specific Health and Safety Plan. Please contact us with your comments and suggestions on these items. Your earliest attention on these topics would be greatly appreciated. Our telephone facsimile number is 1-708-449-0507, for your convenience.

Yours truly,

PROFESSIONAL SERVICE INDUSTRIES, INC.

  
Joseph F. Whittle, Jr., P.E.  
Senior Division Manager

JFW:ds

cc: Marty Larson  
Carl Goetz

RECEIVED

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IEPA 20

## SUPPLEMENTARY SAMPLING PLAN

### Proposed Stony Creek Golf Course

#### 1.0 Soil Vapor Testing

- A. Initial Samples (coarse grid) - *Shallow, top 18 to 24 inches*
  - 1) 300 foot spacing (about 40 points)
  - 2) Supplemental points (about 10 additional)
- B. Initial Tests in Field
  - 1) Methane-specific
  - 2) Other total VOC's (non-specific)
- C. Add Samples at High Initial Readings
  - 1) At 10% highest initial readings (about 5 points)
  - 2) Add 4 points 50 feet from initial (add 20 extra, total)
  - 3) Field test for Methane and other total VOC's (same as B above)
- D. Perform Full Vapor Analyses
  - 1) At three highest field readings
  - 2) Sample into Tedlar Bags
  - 3) In lab, test for IEPA Target Compound List (159 parameters)

#### 2.0 Groundwater Testing

- A. Perimeter Monitor Wells
  - 1) Stainless steel (VOC sampling)
  - 2) Four locations, northwest, northeast, southeast and southwest
  - 3) Record elevations to estimate gradient
- B. Sample and Test Each for IEPA Target Compound List

#### 3.0 Creek Sediment Testing

- A. Samples
  - 1) Five total
  - 2) Upstream end of both creeks (2)
  - 3) Confluence of both (1)
  - 4) Between those, for both (2)
- B. Testing - IEPA Target Compound List for All

**PROFESSIONAL SERVICE INDUSTRIES, INC.**

**SITE SPECIFIC SAFETY AND HEALTH PLAN**

Proposed Stony Creek Golf Course  
Mayfield Avenue and 103rd Street  
Chicago Ridge, Illinois

Prepared By: \_\_\_\_\_ Date: \_\_\_\_\_

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

# PROFESSIONAL SERVICE INDUSTRIES, INC.

## SITE SAFETY AND HEALTH PLAN

### A. General Information

#### 1.0 Introduction

This Safety and Health Plan (SHP) is prepared to provide information for worker safety and emergency procedures on the specific site named and described below. The SHP, as prepared, is not intended as a stand alone document, but will augment the Professional Service Industries Employer's Safety and Health Plan (ESHP), and serve as Appendix D of that document. A copy of the ESHP and SHP must be made available to all personnel working under the conditions of the SHP, and must be reviewed with all personnel. Following review, all personnel will sign the acknowledgement page indicating that they have read and understand the requirements of the SHP.

#### 2.0 Objective

The initial objective will be to install five (5) perimeter groundwater monitoring wells, collect soil and water samples at these locations, collect sediment samples from an adjacent creek and perform soil vapor testing. The proposed date of investigation is during the months of November and December, 1990.

#### 3.0 Overall Hazard: Low

#### 4.0 Background Review: Preliminary

#### 5.0 Personnel

<u>Name</u>	<u>Project Title</u>	<u>Responsibilities</u>
Greg Butcher	Team Leader	Safety and Health Officer
Will Murphy	Driller	Site Safety and Health Supervisor
Bill Schwartendruber	Engineer	Alternate Site Safety and Health Supervisor

The Site Safety and Health Supervisor (SSHS) will direct the safety program. The SSHS will advise and consult with the Health and Safety Officer on all matters related to the health and safety of those individuals associated with response actions. The Alternate Site Safety and Health Supervisor will assume the duties and responsibilities of the Site Safety and Health Supervisor when he is not on site or when appointed to do so.

## **B. Site Characteristics**

### **1.0 Site Description and History**

The site is located at Mayfield Avenue, immediately north of 103rd Street, in Chicago Ridge, Illinois. Portions of the property were used for sanitary landfill operations beginning in the 1950's and continuing until about 1965. It is believed that a variety of chemicals, flammables, diesel fuel, paint and construction rubble may have been disposed of at the site. Large quantities of earth fill have reportedly been placed across the site in depths ranging from five (5) to fifteen (15) feet and the surface has been rough graded for golf course contouring.

### **2.0 Hazard Evaluation**

Potential site hazards are posed by the possible presence of the afore-mentioned contaminants in the soil and/or groundwater in some areas of the site and their possible release into the air. The health risks at this time, should contact occur, are unknown. Generally, the concerns are for the physical safety of the workers, fire and explosion hazards and the possibility of encountering unknown chemicals.

Based on preliminary testing which has been performed at the site, the hazard potential is believed to be low. The primary hazard is anticipated to be Methane gas in potentially explosive concentrations (other hazards may also be present).

## **C. Site Safety**

### **1.0 Personal Protective Equipment**

Level D personal protection will be worn during all drilling and sampling which could result in exposure to site contamination. This will consist of hard hats, and rubber gloves and boots.

Modifications: Should TOV in excess of 50 ppm over background levels be detected, exposed personnel will stop work, don respirators fitted with organic vapor or organic vapor/acid gas filters, initiate stop work procedures, and evacuate the area. If combustible gasses exceed 25% of the LEL, the area will be evacuated. The PSI project manager will be contacted for further instructions.

## 2.0 Monitoring

Monitoring of air quality will be conducted during initial entry, while establishing work zones; and hourly thereafter while working on site. In addition, readings will be taken more frequently for the following conditions:

- at the direction of the Site Safety and Health Officer
- at the request of any site worker
- upon detection of any unusual smell
- upon anyone experiencing unusual symptoms

The air will be monitored with an HNu Model P1-101 Photoionization Detector (PID) and a combustible gas meter. Wind direction, temperature and other appropriate weather conditions will be monitored.

## 3.0 Decontamination

Prior to site entry, the Site Safety and Health Officer will assure all personnel are familiar with decontamination procedures. Decontamination equipment will be emplaced after work zones are established and prior to commencing work which may result in exposure to hazardous substances. While working, personnel will minimize contact with hazardous substances or contaminated equipment. All personnel leaving the Exclusion Zone will decontaminate or dispose of contaminated equipment and clothing in the Contaminate Reduction Zone. Reusable items will be decontaminated using a steam cleaner or industrial detergent and potable water. Drilling equipment will be decontaminated in the Exclusion Zone using a steam cleaner and potable water. Water will be allowed to drain on site and routed so as not to create a muddy or slippery condition.

#### 4.0 Material Disposal

Potentially contaminated disposable protective items, if any, will be placed in plastic disposal bags, tied, and left on site for disposal by the owner. Drill cuttings will be left on site. Purged water from the monitoring wells will be discharged to the ground surface at the site.

#### 5.0 Site Control

A buddy system will be employed during all work on site. The Site Safety and Health Officer will assign each worker a buddy. Buddies will be responsible for observing their worker's activities and providing quick assistance in the event of an emergency. All work will be in compliance with the appropriate activities SOP for safe work practices. (See appendix B) Site work zones will be established prior to commencing the work. All active investigation operations, e.g. drilling and sampling, will be conducted wearing the prescribed level of personal protective equipment within the Exclusion Zone. The Exclusion Zone will isolate nonworkers from hazards associated with investigation operations.

Eating, drinking, smoking, chewing of tobacco, etc. will not be permitted at the site.

#### 6.0 Medical Surveillance

All personnel listed above or their replacements will be enrolled in a medical surveillance program in accordance with OSHA 29CFR1910.120 (f). Medical examinations will be performed locally for any worker who develops signs or symptoms of overexposure to hazardous substances. Medical examinations and records maintenance will be in accordance with OSHA 29CFR1910.120 (f). During site work; heart rate, body temperature, and water loss will be monitored when appropriate, or when temperatures exceed 90° Fahrenheit.

#### 7.0 Training

The Safety and Health Officer will assure all personnel are versed in the contents of this Safety and Health Plan and have received training in accordance with OSHA 29CFR1910.120 (e). Prior to initiating activities which could result in exposure to hazardous substances, the Site Safety and Health Officer will conduct a pre-entry

briefing, identify symptoms of overexposure to site contaminants, identify means of recognizing emergency situations, and rehearse the Emergency Contingency Plan with site personnel.

#### D. Emergency Contingency Plan

##### 1.0 Emergency Telephone Numbers

Ambulance	(708) 422-3151
Hospital ER	
Palos Hospital	(708) 361-4500
Christ Community Hospital	(708) 857-5355
Poison Control Center	(708) 942-5969
Fire Department	(708) 422-3151
Police Department	(708) 422-3135
Environmental Medicine Resources	
- 24 Hour Telephone	(404) 455-0818
- Satellite Paging	(800) 869-2337
	ID Ext 5125
Chemical Manufacturing Association	
- Chemical Referral Center	(800) 262-8200
State Emergency Response Center	
	(708) 425-7700
National Response Center	(800) 424-8802

##### 2.0 Administrative Telephone Numbers

PSI Team Leader	(708) 449-0500
PSI Project Manager	(708) 449-0500 or
	(414) 782-1600

##### 3.0 Evacuation Routes/Procedures

(See Appendix A, Emergency Evacuation Routes)

Should an emergency situation occur, the Site Safety and Health Supervisor or alternate should assess the situation, determine the appropriate response, and direct its execution. In the event of personal injury, a field team member trained in first aid will administer treatment. The victim will be transported to Christ Community Hospital, if necessary, which is at 4440 West 95th Street, Oak Lawn, Illinois. Transport will be by ambulance or on site vehicle via the Emergency Evacuation Route. If emergency conditions warrant evacuation of the site, personnel will be directed to move upwind to a distance/location specified by the Site Safety and Health Supervisor.



#### 4.0 Alerting/Response Procedures

A telephone is available at the driving range which is currently operational along the east boundary of the site. The Site Safety and Health Officer will direct a field team member to notify the appropriate contacts listed above of emergency conditions. The following hand signals will be used if oral communication is impaired:

1. Hand gripping throat - can't breathe
2. Grip partners wrist or place both hands around waist - leave area immediately, no debate!
3. Hands on top of head - need assistance
4. Thumbs up - OK, I'm alright, I understand
5. Thumbs down - No, negative

If anyone is exposed to on site chemicals, he will be accompanied by another team member into the Contamination Reduction Zone (or farther from the source if conditions warrant) and decontaminated as appropriate. In the event of evacuation, the Site Safety and Health Supervisor will post field team members on approaches to the site to prevent entry until the field members are relieved.

## 5.0 Acknowledgement of Training

This will acknowledge that the information contained in the foregoing Site Safety and Health Plan and the PSI Employer's Safety and Health Plan has been presented and explained to me; and that I understand the information and agree to comply with the requirements and provisions contained in these documents.

Name: _____	Date: _____
Name: _____	Date: _____
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Name(s) of Presentor(s):

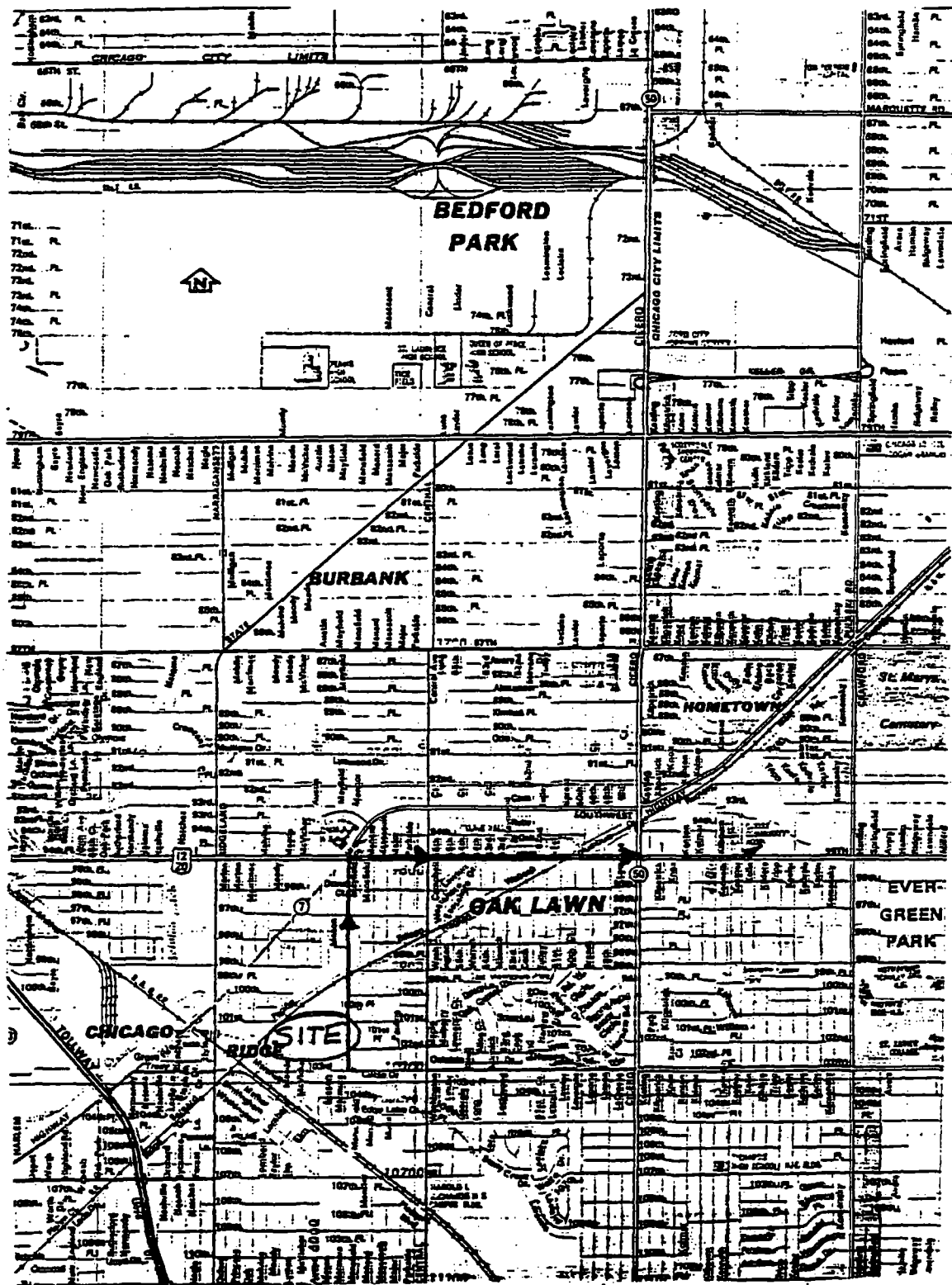
\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

**APPENDIX A**  
**EMERGENCY EVACUATION ROUTE**



Evacuation Route: Mayfield North to 95th Street East to  
Christ Community Hospital

## PROJECT NAME

Stony Creek Golf Course  
Oak Lawn, Illinois

## Evacuation Route

## PROJECT NO.

041-04039

## DATE

May 31, 1990